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FUEL OIL NEWS

THE 1991 SOURCE BOOK

December 1990 Vol. 55/No. 12

FUEL OIL NEWS

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17 The Oil Heat Industry: 1990
By George Schultz
Our 13th annual profile of marketers.

40 Association Roll Call

57 Directory of Manufacturers
Aphabetical listing of the industry's equipment suppliers.

73 Oil Handling Directory
Products and services cross-referenced.

79 Heating & Cooling Directory
Products and services cross-referenced.

81 Accessories Directory
Products and services cross-referenced.

DEPARTMENTS

3 Dateline
8 Editorial
10 News & Trends
12 Strictly Personal
14 Calendar
87 Viewpoint
88 Classified Ads
90 Advertisers Index

COVER:

Perhaps now more than ever, the fuel oil industry needs a good positive image. It needs to feel good about itself. Our 13th annual profile of marketers, presented in this issue, can provide some of the needed uplift. In it, for example, we find marketers are selling more fuel to more customers than last year. *Photo by Richard Shaner.*

STAFF

Hunter Publishing Limited Partnership

Editorial Offices:
950 Lee St.
Des Plaines, IL 60016
(708) 296-0770
FAX (708)803-3328

Editorial Staff:
Peggy Smedley
Editorial Director & Editor in Chief
Howard Shingle
Editor
George Schultz
Executive Editor
Colleen Finnerty
Design & Production Editor
J. Richard Shaner
New York

Business, Advertising & Production Offices:
950 Lee St.
Des Plaines, IL 60016
(708) 296-0770
FAX (708)803-3328

Executive Staff:
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Chairman of the Board
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Reader Service Contact
Elizabeth Santelli
Classified Ad Manager
Kristen Zulaski
Executive Gift Guild
FAX (708)803-3328

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The Oil Heat Industry: 1990

Our 13th annual profile of marketers.

By George Schultz
Executive Editor

This year's study makes a "baker's dozen" that we've completed since *Fuel Oil News* instituted its annual "Source Book" issue back in December 1978. The industry has evolved tremendously in the ensuing years, and has weathered many storms. None has been greater than the one facing the industry right now. In just the past three months we've witnessed roller coaster prices brought about by speculation and fear. As a result, competitive fuel intrusions are once again eroding oil heat's marketshare, creating great concern.

Our annual industry profile has documented many trends in computerization, fuel treatment and equipment sales. In all, we have provided the industry with important statistics that have helped and will continue to help marketers and industry suppliers in making decisions concerning the future of their businesses. We believe this function is important even in a crisis. After all, the Middle East situation will end eventually, one way or another, and we will return to some sort of normalcy, for some time frame... before another dilemma once again creates problems for oil heat marketers.

TABLE 1
Type of Petroleum Sold
(% of readers)

	Fuel Oil	Gasoline
New England	97.5	35.0
Mid-Atlantic	97.7	43.2
South	100.0	55.3
Midwest	100.0	83.7
West	100.0	63.0
All Sections	**99.0**	**56.0**

TABLE 2
Petroleum Revenue as Percent of Total Business Income

New England	84.6
Mid-Atlantic	85.1
South	85.8
Midwest	50.9
West	76.8
All Sections	**76.6**

Thanks for Your Help

As always, we have to thank our readers for assisting us in the development of the statistics contained herein. Each fall we mail out rather complicated questionnaires to a random group of marketers throughout the U.S. These forms contain more than 150 questions, covering virtually every aspect of their operation. We're always amazed at the excellent responses we receive from marketers, far above what so-called experts claim can be anticipated from such a survey.

We use a random method of sampling in order to get answers that are statistically valid. Also, we don't want to bother the same dealers year after year, even though if we did, we might get data that would be more easily tracked and plotted.

In any event, thanks to the many marketers who completed our questionnaire, whoever they are. Until somebody comes along with a more scientific approach that's manageable, we'll stand behind these figures as an accurate assessment of the heating oil industry and the many thousands of people who earn their livings in it.

TABLE 3
Sources of Business Income
(% of total business income)

	FUEL OIL				GASOLINE			
	Retail		Bulk		Retail		Bulk	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
New England	90.0	2.5	15.0	15.0	27.5	5.0	5.0	12.5
Mid-Atlantic	81.8	4.5	11.4	18.2	27.3	11.4	11.4	13.6
South	76.3	15.8	15.8	26.3	23.7	26.3	13.2	13.2
Midwest	69.8	11.6	32.6	18.6	51.2	18.6	25.6	30.2
West	81.5	11.1	25.9	25.9	37.0	14.8	22.2	18.5
All Sections	**79.9**	**9.1**	**20.1**	**20.8**	**33.3**	**15.2**	**15.5**	**17.6**

TABLE 4
Petroleum Products Sold
(% of total volume)

	No. 2	No. 1	No. 4	Nos. 5&6	No. 2 for Diesel	Gasoline	Lpg/Lng	Other
New England	85.7	2.8	0.2	0.3	4.9	3.7	1.4	0.8
Mid-Atlantic	63.5	7.4	0.1	0.2	12.3	14.2	*	*
South	51.3	15.3	3.1	*	7.5	18.2	2.6	2.7
Midwest	40.9	8.7	*	*	20.3	27.7	5.5	*
West	61.7	5.8	*	*	21.8	22.4	3.6	0.9
All Sections	**60.6**	**8.0**	**0.7**	**0.1**	**13.4**	**17.2**	**2.6**	**0.9**

*** - Less than .1%**

Who Are They?

We always start off our survey by trying to ascertain what businesses our respondents pursue. **Table 1** shows that 99% of the people answering our questionnaire sell fuel oil, and 56% of them also sell gasoline. In past years we've made a big deal over the fact that the gasoline portion was slowly accelerating, suggesting that marketers were becoming more diversified.

Figure 1 shows that the gasoline percentage seems to be cyclical – it went up after our initial survey in 1978, then fell for the next two years, shot back up in 1982, then fell for three years and jumped up again in '86. It's been on a downward slide since then. In 1989, the number was 60.9%.

Market conditions were very much a factor in this phenomenon. In '79 there was a gasoline shortage, and accompanying price escalation. Marketers were quick to take advantage by selling more motor fuel. In '82 we were in the midst of the first oil glut; motorists were tired of conserving and started to drive more so marketers again sold more gasoline. The same thing happened in '86, when pump prices dropped to the lowest point in several years, thereby increasing demand and marketer sales.

The percentage of respondents who sell fuel oil has stayed pretty much even over the 12 year period. Actually, this year's figure is the highest we've ever recorded. Note that the regional percentages continue to show the same trends as in past years, particularly in the gasoline category. Marketers outside the Northeast are much more likely to sell gasoline than their counterparts in New England and the Mid-Atlantic, although the Northeast is increasing too. The Mid-Atlantic number is five percentage points above last year's average, and New England is up about 11%. This upward trend comes despite the fact that the questionnaires were sent in the midst of the Iraqi situation when gasoline price increases were the principal media focus.

Table 2 shows a slight downward change from our last survey, of about three percent. Does this mean that more marketers are relying on non-petroleum product/service revenue? Perhaps, but it's difficult to say this with confidence, even though 1989's figure was below 1988. The West was down 10 points from 1989, and the Midwest was down nearly 20%. These decreases were offset by increases in the other sections, notably New England, which was up 13% from last year.

This year is the seventh time

TABLE 5
Average Size of Business

	Home Fuel Oil Accts	No. of C/I Accts	Gals. of Distillate	Gals. of Residual	Gals. of Gasoline	No. of Empls
New England	2,181	244	2,710,714	770,000	2,500,000	13.8
Mid-Atlantic	2,944	339	3,267,633	581,250	2,068,077	16.8
South	1,897	189	857,492	169,812	1,599,167	7.2
Midwest	834	70	1,287,871	493,182	1,334,069	11.3
West	2,261	196	2,042,500	I.D.	1,001,154	12.0
All Sections	**2,023**	**208**	**2,033,242**	**503,561**	**1,700,493**	**12.2**

I.D. - Insufficient Data

TABLE 6
Annual Heating Oil Sales by Types of Customers
(% of total customers served)

	Private Homes	Apts	Education	Hospitals	Commercial	Indus
New England	80.8	4.0	1.7	2.4	7.9	2.2
Mid-Atlantic	77.9	4.4	0.8	0.5	13.9	3.2
South	80.6	2.9	0.9	0.1	12.2	6.3
Midwest	86.6	1.4	1.4	0.6	6.4	2.4
West	77.0	3.2	0.6	6.5	11.2	1.5
All Sections	**80.6**	**3.2**	**1.1**	**2.0**	**10.3**	**3.1**

we've asked this question and is the lowest percentage we've recorded. Dealers in 1986 said petroleum product sales accounted for 87.2% of their revenue. That was the highest percentage recorded on this question.

A Closer Look

We've thus established that virtually all our respondents sell fuel oil and a clear majority sell gasoline, and that petroleum products represent better than 75% of their income. Next we polled marketers to determine how important retail and wholesale sales of these products are to their operation. We asked them to list these products as either primary or secondary sources of income in their overall operations and the results are shown in **Table 3**.

Just under 80% said retail fuel oil is a primary source of income for them, although the responses from the various regions weren't identical. Once again, Northeast marketers are more heavily involved in retail fuel oil sales, with more than 90% in New England and 81.8% in the Mid-Atlantic saying that it is a primary source of income. Just a handful said that it was only a secondary source.

Marketers in other sections of the country are less dependent on retail fuel oil sales, but not by a whole lot. Western dealers shot up significantly, from 44% last year to 81.5% in 1990. The South also was up, and the Midwest was unchanged.

Bulk fuel oil sales is primary to about 20% nationally. The same differences are evident between the Northeast and the other sections. New England and Mid-Atlantic dealers depended less on bulk sales, either as a primary or secondary source of business income, than marketers in other areas of the country.

The importance of retail and wholesale gasoline sales also shows the same geographical differences. Only a small percentage of the Northeasterners depend on gasoline, retail or wholesale, as either a primary or secondary source of business income. Retail gasoline is a major source to more than half of Midwesterners, but to fewer Southerners and Westerners than in past years. Bulk gasoline is primary to less than half of the Western marketers, a change from the last survey.

All the national averages in Table 3 are within a few points of last year's totals, except primary bulk gasoline, which dropped from 33.5% in 1989 to 15.5% this year. The Iraqi situation could well be the cause here – few independents can compete with the majors on price in an escalating market.

Table 4 breaks down sales of petroleum products even further and shows the average percentages of home heating oil, commercial and industrial fuels, diesel, gasoline, etc. No.2 oil is still the biggest seller, accounting for more than 60% of all

Fig. 1: Percentage of Marketers Selling Fuel Oil & Gasoline 1978-1990

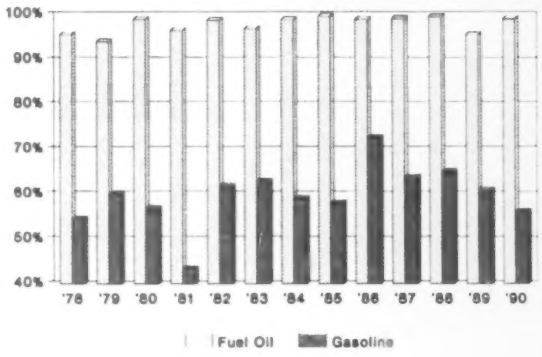


TABLE 7
Total Annual Company Dollar Revenues
(% of marketers in each category)

	Less than 1 Million	$1- $5 Mil.	$5 - $10 Mil.	$10- $25 Mil.	$25 Mil. +
New England	34.2	44.7	5.3	5.3	10.5
Mid-Atlantic	37.2	39.5	16.3	2.3	2.3
South	50.0	31.6	10.5	7.0	*
Midwest	31.0	50.0	9.5	4.8	4.8
West	20.0	56.0	20.0	*	4.0
All Sections	**34.5**	**44.4**	**12.3**	**4.1**	**4.3**

*** - Less than .1%**

TABLE 8
Pre-Tax Earnings
(% of marketers in each category)

	Less than $50,000	$50,000 - $100,000	$100,000 - $200,000	$200,000 $500,000	$500,000 +
New England	31.3	28.1	15.6	12.5	12.5
Mid-Atlantic	34.2	34.2	10.5	7.9	13.2
South	46.9	28.1	18.8	3.1	3.1
Midwest	45.0	30.0	12.5	7.5	5.0
West	38.1	38.1	9.5	9.5	4.8
All Sections	**39.1**	**31.7**	**13.4**	**8.1**	**7.7**

TABLE 9
EDP Use
(% of marketers using computers)

New England	80.0
Mid-Atlantic	72.7
South	50.0
Midwest	65.1
West	77.8
All Sections	**69.1**

TABLE 10
Computer Applications
(% of marketers using EDP for listed operations)

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Accts Rec/Billing	75.0	90.6	94.7	92.9	95.2	89.7
General Ledger	67.5	75.8	84.2	78.6	81.0	77.4
Accts Payable	65.0	75.8	78.9	71.4	66.7	71.6
Payroll	40.0	56.3	52.6	60.7	52.4	52.4
Delivery Sched	67.5	71.9	36.8	25.0	52.4	50.7
Excise Tax	50.0	50.0	47.4	50.0	47.6	49.0
Word Processing	60.0	59.4	36.8	46.4	38.1	48.1
Inventory Recon	42.5	46.9	47.4	64.3	38.1	47.8
Fixed Assets	42.5	43.8	36.8	32.1	28.6	36.8
Pricing Analysis	15.0	25.0	21.1	14.3	14.3	17.9
Oil Price Info	15.0	21.9	21.1	10.7	19.0	17.5
Supplier Costs	12.5	34.4	10.5	14.3	9.5	16.2
Comm w/Stations	2.5	*	15.8	17.9	19.0	11.0

TABLE 11
Trucks Per Marketer

	Average No.		Average Size		Opt. Size
	Delivery Trucks	Trailers	Largest	Smallest	Preferred
New England	6.2	1.7	3,227	2,349	3,152
Mid-Atlantic	6.0	1.6	3,128	2,477	2,968
South	4.7	0.7	2,312	1,706	2,119
Midwest	3.0	1.3	2,314	1,943	2,332
West	4.5	2.1	2,896	1,915	2,645
All Sections	**4.9**	**1.5**	**2,775**	**2,078**	**2,643**

TABLE 12
Engines by Type
(% of readers)

	USE			PREFER	
	Diesel	Gasoline	Both	Diesel	Gasoline
New England	55.3	2.6	42.1	89.5	*
Mid-Atlantic	42.9	31.0	26.2	59.5	16.7
South	18.9	45.9	35.1	54.0	27.0
Midwest	28.6	31.4	40.0	71.4	22.9
West	26.9	26.9	46.2	65.4	19.2
All Sections	**34.5**	**27.6**	**37.9**	**68.0**	**17.2**

Truck Tanks by Type
(% of readers)

	USE			PREFER	
	Steel	Alum	Both	Steel	Alum
New England	13.2	39.5	42.1	7.9	73.7
Mid-Atlantic	29.7	32.4	37.8	24.3	56.8
South	54.3	25.7	20.0	22.9	48.6
Midwest	65.6	15.6	18.8	32.5	34.4
West	36.0	16.0	48.0	28.0	68.0
All Sections	**39.8**	**25.8**	**33.3**	**23.1**	**56.3**

petroleum product sales nationwide.

The regional picture shows a slightly different story, however. New England marketers have a very high percentage of No.2 oil, although three of the other four regions also sell a majority of No.2 among products handled. Only the Midwesterners sell less than 50% of their oil in the form of No.2.

Note that sales of kerosene (No.1), as well as commercial and industrial fuels, are an insignificant portion of the total, accounting for less than 13%, even when added to Lpg and "other" (lubes and machine oils). The only real sellers are No.2, diesel and gasoline.

Size of Businesses

Table 5 attempts to provide some averages as to the volume and number of accounts served by heating oil merchants. This year's average volume of 2.033 million gals. of fuel oil is up about 200,000 gals. from 1989. This increase possibly is attributable to the cold December of 1989, because the increase is significant in the Northeast where record temperatures made supplies tight and drove up prices.

The Midwest and South actually lost some volume over the previous year, while the West was up about 250,000 gals. **Figure 2** shows that the average volume has been cyclical in the 12 years we've been publishing this study. There was a downward trend since 1986 in both fuel oil and gasoline volume, but this year may be the beginning of a reversal.

Gasoline volume, as noted in Figure 2, is up somewhat from last year. The rise in pump price since Iraq invaded Kuwait hasn't seemed to affect demand yet. Only New England showed a big increase from 1989, with all the other sections reporting marginally lower gasoline volume. The overall effect, however, was an increase in the national average of some 250,000 gals. per marketer who sells gasoline.

The average number of customers per marketer also shows cyclical action as shown in **Figure 3**. This year the average is up nearly 700 from 1989, to a national mean of 2,023 customers per marketer. New England, Mid-Atlantic and Western marketers average more than 2,000 customers each.

Lower figures in the South and Midwest pull the overall average

down, but it still is higher than it's been since we began our survey. Acquisitions and consolidations have something to do with this phenomenon. There are fewer dealers, but those who remain have more customers.

Commercial/industrial customers actually dropped on average this year, from 238 in 1989 to 208 per marketer. The Midwest took a real axing, but some other sections posted healthy gains in C/I business. The 10% change from last year probably doesn't signal a trend, however, just a statistical deviation. The average residual oil volume per marketer was double last year's average. We can't explain why.

Table 5 also shows the average number of employees per marketer responding to our questionnaire. That figure of 12.2 is almost the same as 1989 (11.9%), although there's been some variations in the regions. New England marketers dropped five employees, while the other sections reported small gains in their work forces – except the South, which dropped 1.7 people per company.

It's no mystery as to where the fuel oil is being sold by marketers. **Table 6** shows that more than 80% of their customers are private homes, with commercial and industrial customers representing a combined 13.4% and the remainder apartments, educational institutions, hospitals and "other" (which we didn't bother to list) such as agricultural. This table hasn't changed much in the 12 years we've published it, so it's evident that there hasn't been any shift in the market characteristics for our industry, nor is there likely to be any change in the future. Single family homes are the heating oil marketer's bread-and-butter.

Dollars and Cents

Tables 7 and **8** are pretty self-explanatory and show the percentage of marketers who reported dollar revenues and pre-tax earnings at the levels indicated. More than three-quarters of our panel have total revenues of under $5 million (categories 1 & 2 of Table 7) and pre-tax earnings of less than $200,000 (categories 1-3 of Table 8). Neither table shows much change from previous years – the majority of oil heat marketers are small companies, with only a few "Petros" around.

Fig. 2: Average Marketer Volume in Gals. of Fuel Oil & Gasoline 1978-1990 (add 000)

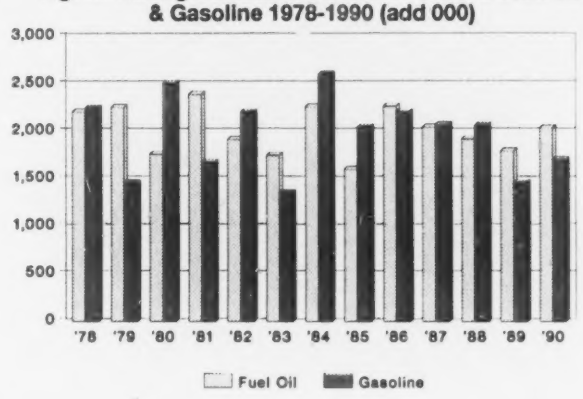


Fig. 3: Average Number of Residential Fuel Oil Customers 1978-1990

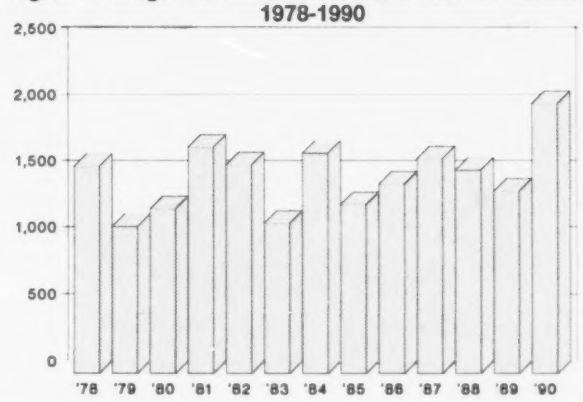


TABLE 13
Average Age of Trucks

	Year of Oldest	Year of Newest
New England	1975.8	1981.3
Mid-Atlantic	1974.9	1985.1
South	1975.1	1983.8
Midwest	1974.9	1981.5
West	1971.6	1983.3
All Sections	**1974.5**	**1983.0**

Percent Buying This Year

	New Truck	New Tank
New England	34.2	15.8
Mid-Atlantic	29.5	18.2
South	28.9	10.5
Midwest	26.8	14.6
West	25.9	12.0
All Sections	**29.1**	**14.2**

TABLE 14
Average Drop in Gallons

	275-gal. Tanks	550-gal. Tanks
New England	174.0	347.3
Mid-Atlantic	182.6	363.2
South	174.6	344.4
Midwest	173.3	374.4
West	178.8	362.4
All Sections	**176.7**	**358.3**

TABLE 15
Percent Using Two-Way Radio

New England	80.0
Mid-Atlantic	65.9
South	60.5
Midwest	53.5
West	74.1
All Sections	**66.8**

There was one significant change in the regional tallies. The percentage of Southerners with revenues under $1 million jumped from 29.3% last year to 50% in 1990. There was a corresponding drop in the percentage in the $1 million-$5 million column. This drop was the only change of note in any of the regional figures in Tables 7 & 8.

Computers

More than two-thirds of the marketers we polled said they use computers for at least some of their operation, as shown in **Table 9**. Over 80% of the New England marketers checked "yes" to this question, the highest group. Only 50% of Southern dealers said they use computers, the only section with less than a clear majority.

The overall trend toward the use of computers is nicely demonstrated in **Figure 5**, which shows the percentage who responded positively to this question over the past 12 years. With the ever cheaper price of computer hardware and growing acceptance of PCs in the workplace, it's hard to believe that anyone still would be holding out. If nothing else, computers are wonderful for doing word processing (even IBM is out of the typewriter business!).

Table 10 reveals how marketers are using their computers. Accounts receivable/billing leads the list, with almost 90% of the marketers who said "yes" in Table 9 using their computers for this function. General ledger is second, with accounts payable and payroll third and fourth, respectively. The top three are unchanged from last year (their overall rank, not the percentages). Payroll moves up from eighth place last year.

Computers used to be the hot topic in the industry but they've become so commonplace that they're scarcely worth talking about much anymore. There seems to be a growing number of vendors who are selling software packages to marketers. The latest thing is heat loss calculation programs, which have become quite sophisticated and easy to use. We counted at least three different firms showing such products at industry trade shows this past year.

Of course integrated heating oil marketing software has come a long way since the 1970s when it was first introduced via time sharing services such as Petrodata. Now they're being run on PCs, with the cost a great deal less than systems just a few years ago. You also get more for your money as the software has been continuously improved and expanded.

Rolling Stock

As computers get cheaper, trucks get more expensive. The result is that marketers are reducing their rolling stock as shown in **Figure 4**. In the 12 years that we've been tracking the average number of trucks per marketer, there has been two periods of steady decline. The first from 1981 to 1985, and the

TABLE 16
Dealers Trading on the Oil Futures Market

New England	32.4
Mid-Atlantic	13.6
South	5.2
Midwest	4.7
West	3.7
All Sections	**11.9**

Fig. 4: Average Number of Delivery Trucks Per Marketer 1978-1990

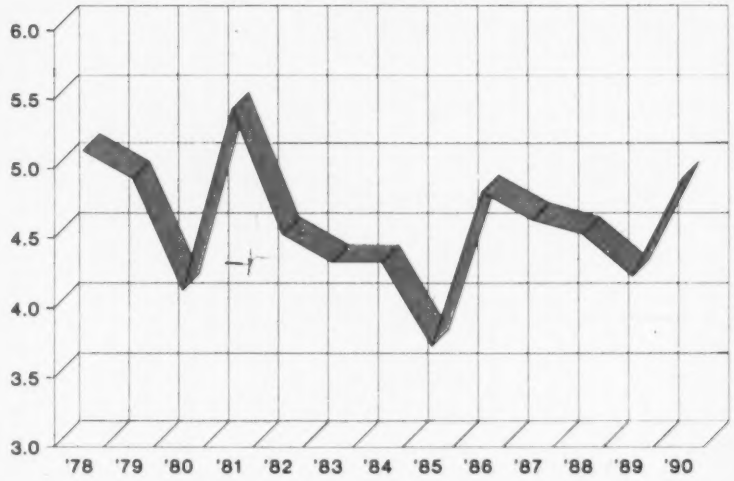


TABLE 17
Dealers Operating Bulk plants (in %)

	With Bulk Plants	Bulk Plants Storing Other Products
New England	51.3	75.0
Mid-Atlantic	52.3	87.0
South	73.7	53.6
Midwest	76.7	90.9
West	77.8	85.7
All Sections	**66.4**	**78.4**

TABLE 18
Average Storage Capacity in Gals.

	No. 2 Oil	Diesel	Gasoline	Lpg	Kero
New England	506,700	44,115	54,000	45,100	20,643
Mid-Atlantic	249,833	5,800	38,182	I.D.	16,182
South	115,244	18,363	35,000	I.D.	26,444
Midwest	90,188	22,125	46,240	54,000	23,444
West	111,071	39,200	33,539	I.D.	78,143
All Sections	**214,607**	**25,921**	**41,392**	**49,500**	**32,971**

I.D. - Insufficient Data

second since 1986. The "peaks" in this chart correspond with the periods when fuel oil volume increased, as shown back in Figure 2.

The average marketer now operates 4.9 delivery trucks, up 0.7 from 1989. In addition, marketers operate an average of 1.5 tractor-trailers, up a similar 0.7 from last year. (**Table 11**)

To compensate for the long-term reduction in the fleet size, marketers are increasing the size of the tanks on the rigs they retain. The average size for the largest tank in dealer fleets is 2,775 gals., compared with 2,739 gals. last year. The average size of the smallest delivery truck tank is 2,078 gals., up 35 gals. from the figure posted last year, which was up from the year before that.

Marketers' ideal hasn't risen, however. This year it's 2,643 gals., compared with 2,669 gals. in '89. We asked dealers what they thought was the optimum size tank for their particular area and needs, and this was the average figure they came up with.

Gasoline vs. diesel; steel vs. aluminum... two questions we ask every year with predictable results. The national figures in **Table 12** haven't changed much, and most of the regional changes are toward the "both" column in engine and tank construction categories.

The number of New Englanders who operate diesel-only fleets is down 5% from last year; the number of gasoline-only is down 8%. There were similar but less dramatic changes in the other sections as well. In terms of preference, virtually the same share gave the nod to diesel this year (68% nationwide in '90 vs. 68.1% last year).

A majority of dealers (56.3%) prefer aluminum tanks. Steel-only

Fig. 5: Percentage of Marketers Using Electronic Data Processing 1978-1990

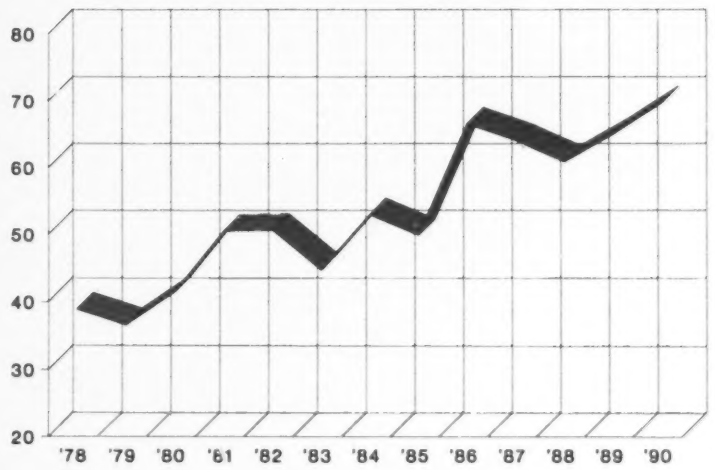


TABLE 19
Dealers Using Additives
(In %)

	Using Additives	Blended at Bulk plant	Blended on Trucks	Blended In Cust Tanks
New England	46.2	27.8	33.3	38.9
Mid-Atlantic	38.6	35.3	29.4	58.8
South	46.4	15.4	30.8	69.2
Midwest	53.5	56.5	69.6	52.2
West	37.0	10.0	30.0	80.0
All Sections	**44.3**	**29.0**	**38.6**	**59.8**

TABLE 20
Percent of Fuel Oil Dealers Who Sell, Install and/or Service All Types of HVAC Equipment

New England	90.0
Mid-Atlantic	65.9
South	31.6
Midwest	34.2
West	59.3
All Sections	**56.8**

TABLE 21
Sources of Business Income
(% of dealers reporting)

	Heating Equipment			
	Retail	Wholesale	Air Conditioning	Other
New England	80.0	22.5	35.0	12.5
Mid-Atlantic	59.1	11.4	31.8	11.4
South	31.6	7.9	15.8	10.5
Midwest	41.9	11.6	27.9	9.3
West	55.6	14.8	37.0	18.5
All Sections	**53.6**	**13.6**	**29.5**	**12.4**

TABLE 22
Trends in Equipment Sales Past 12 Months
(% of dealers reporting)

	Residential Up	C/I Up
New England	30.6	13.9
Mid-Atlantic	24.1	20.7
South	10.5	7.9
Midwest	20.0	20.0
West	29.6	14.8
All Sections	**23.0**	**15.5**

fleets are more prolific, with 39.8% of our marketers saying all their tanks are steel, compared with just 25.8% that are all-aluminum and 33.3% that have both steel and aluminum tanks.

The age of truck fleets is another important indicator. It makes sense that for the age of marketer fleets to maintain status quo, the difference between the average age of the oldest and newest trucks should go up one year with every survey. If it goes up more than one year, it indicates that marketers are upgrading their fleets at a faster pace. If it doesn't go up at least one year, marketers are holding off in buying new rigs.

This average age in 1989 was 1979.7, which was arrived at by averaging the ages of the oldest and newest trucks in marketers fleets. This year, the number is 1978.8, almost one year less! This means that dealers are not making fleet replacements at the same pace as last year. It's an indication of the "wait-and-see" posture taken by many as a result of the Middle East crisis and how it will affect heating oil this winter.

The average age of the oldest truck in marketer fleets is about 16 years (1974.5). That's down from 1974.9 last year, which means that the oldest trucks are still on the road to a greater degree. The average age of the newest trucks is 1983.0, down from 1984.4 last year. This further suggests that dealers have not replaced old trucks this year.

When asked if they were planning to purchase a new truck within the next 12 months, 29.1% said "Yes." That's down about 1.1% from the number who answered positively to this question last year. Another 14.2% plan to put a new tank on an existing truck. That's about the same as last year.

Trucks represent the biggest investment for a marketer short of a building or tank farm. Truck and tank manufacturers are important suppliers to the oil heating industry and their performance is an excellent barometer on how the industry itself is doing. When the tank truck guys are slow, the oil heating marketers are slow too.

Trucks deliver the life's blood of the heating oil industry, and marketers average about 176.7 gals. to 275-gal tanks, according to our survey. For 550 tanks, the

TABLE 23
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Oil Burners	Gas Burners	Domestic Hot Water	Boilers	Hydronic Systems
NewEngland	100	47.2	91.7	58.3	52.8
Mid-Atlantic	93.1	41.4	86.2	86.2	62.1
South	39.5	15.8	21.1	18.4	10.5
Midwest	34.9	20.9	18.6	25.6	7.0
West	51.9	18.5	33.3	25.9	11.1
All Sections	**63.9**	**28.8**	**50.2**	**40.9**	**28.7**

COMMERCIAL

	Oil Burners	Gas Burners	Domestic Hot Water	Boilers	Hydronic Systems
New England	69.4	8.3	55.6	55.6	36.1
Mid-Atlantic	72.4	27.6	55.2	65.5	44.8
South	18.4	5.3	7.9	5.3	5.3
Midwest	18.6	4.6	14.0	14.0	4.7
West	25.9	14.8	18.5	18.5	7.4
All Sections	**40.9**	**12.1**	**30.2**	**31.8**	**19.7**

TABLE 24
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Unitary Air Conditioning	Electric Resistance	Insulation	Solar
New England	19.4	*	19.4	13.9
Mid-Atlantic	34.5	6.9	10.3	6.9
South	10.5	2.6	2.6	*
Midwest	14.0	2.3	*	2.3
West	7.4	3.7	*	7.4
All Sections	**17.2**	**3.1**	**6.5**	**6.1**

COMMERCIAL

	Unitary Air Condition	Electric Resistance	Insulation	Solar	Refrig
New England	13.9	2.8	5.6	5.6	5.6
Mid-Atlantic	20.7	3.4	*	3.4	3.4
South	5.3	*	*	*	2.6
Midwest	4.7	*	*	2.3	2.3
West	3.7	7.4	*	3.7	7.4
All Sections	**9.7**	**2.7**	**1.1**	**4.1**	**4.3**

*** - Less than .1%**

average is 358.3 gals. **Table 14** shows that there isn't much variation between the sections in the 275-gal. category; there's a spread of 30 gals. in the 550-gal. category. The bottom line, however, is practically identical to last year's totals of 174.6 gals. and 364.0 gals., respectively.

Trucks also carry two-way radios, so say 66.8% of our respondents. That figure, shown in **Table 15**, is up six points from last year. Midwestern dealers use radios the least – only 53.5% said they have them. That's still a majority.

Table 16 shows the percentage of marketers who trade oil futures. This figure of 11.9% is up 3% from 1989, and is the highest figure recorded since we began asking this question several years back.

Futures trading is a tricky business and can get you in a lot of trouble if you aren't very careful. Marketers who use it as a hedging tool can improve their profitability, but speculators can get wiped out faster than in Atlantic City. Prices this fall fluctuated wildly on the flimsiest of rumors, prompting many critics of commodities trading to once again call for government intervention, controls, etc.

New Englanders seem to be most heavily involved with futures, judging from the results of our survey. More than 32% said they were trading in oil futures. The Mid-Atlantic region, which was once the leading area of futures traders partly because of the proximity to the delivery locations of NYMEX futures, is second with 13.6%. Last year only 4.6% of the Mid-Atlantic marketers surveyed said they traded futures.

TABLE 25
Percent of Fuel Oil Dealers Who Sell, Install and/or Service Selected HVAC Equipment

RESIDENTIAL

	Furnaces	Warm Air Systems	Central Air Condition	Heat Pump	Cont Air Circ
New England	94.4	77.8	22.2	2.8	2.8
Mid-Atlantic	100.0	79.3	51.7	13.8	10.3
South	36.8	15.8	23.7	13.2	2.6
Midwest	25.6	25.6	25.6	4.7	*
West	55.6	48.1	25.9	11.1	7.4
All Sections	**62.5**	**49.3**	**29.8**	**9.1**	**4.6**

COMMERCIAL

	Furnaces	Warm Air Systems	Central Air Conditioning	Heat Pump
New England	58.3	50.0	30.6	8.3
Mid-Atlantic	62.1	48.3	37.8	10.3
South	7.9	7.9	7.9	*
Midwest	18.6	16.3	14.0	2.3
West	25.9	14.8	14.8	7.4
All Sections	**34.6**	**27.5**	**21.0**	

*** - Less than .1%**

TABLE 26
Average Number of Units Installed in Past 12 Months

	RESIDENTIAL			COMMERCIAL		
	Burners	Boilers	Furn	Burners	Boilers	Furn
New England	29.7	31.9	18.0	4.5	5.4	5.3
Mid-Atlantic	125.1	53.7	36.0	16.6	1.9	1.8
South	27.6	28.0	20.9	5.7	3.1	9.0
Midwest	12.0	7.9	38.8	19.5	*	9.7
West	90.9	6.3	57.9	I.D.	I.D.	I.D.
All Sections	**56.9**	**25.6**	**34.3**	**11.6**	**2.6**	**6.5**

*** - Less than 0.1**
I.D. - Insufficient Data

Bulk Plants

Fewer marketers than last year indicated that they operate bulk plants for the storage of heating oil. **Table 17** shows that 66.4% of the marketers questioned said they do have distillate storage. Of that group, 78.4% also store other fuels such as kerosene, gasoline, diesel and Lpg.

Table 18 shows the average capacities for various petroleum products stored at marketer bulk plants. Far and away the largest is No.2 oil, with an average capacity of more than 214,000 gals. That's up 70,000 gals. or so from 1989.

Marketers also store an average of 41,392 gals. of gasoline, 25,921 gals. of diesel and nearly 80,000 gals. of Lpg and kero. That's a combined total of more than 364,000 gals. If all the tanks were full, that would represent a considerable inventory worth as much as $500,000 or more. Not turning this inventory over would severely hurt most organizations.

A growing number of marketers are using additives, which many say is because of the erratic quality of fuel oil these days. About 44% say they use additives, 3% less than so stated last year. These additives are blended either at the bulk plant (said 29.6% of our panel), on trucks (said 38.6%) or right in the customer tanks (as do 59.8% of the marketers surveyed). Some do a combination of two or three of these, which is why the figures don't add up to 100%.

Mid-Atlantic and Western dealers

Fig. 6: Percentage of Marketers Who Sell/Install/Service Heating Equip. 1978-1990

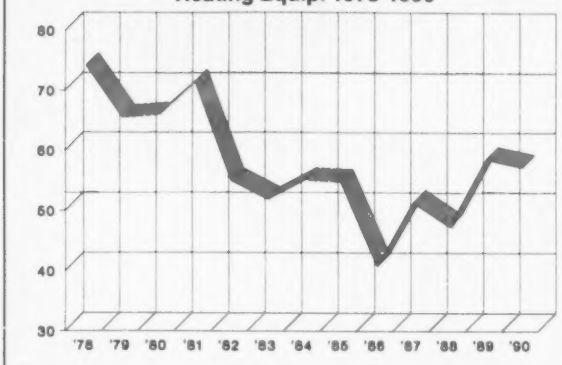


TABLE 28
Service Trucks

	Avg No. per Mktr.	% Buying New Vans in '90	No. of Vans Buying
New England	6.2	38.2	1.3
Mid-Atlantic	9.0	48.1	3.8
South	2.8	26.7	1.3
Midwest	2.5	5.6	I.D.
West	4.9	37.5	1.3
All Sections	**5.1**	**31.2**	**1.9**

I.D. - Insufficient Data

use additives the least. Midwesterners are at the other extreme with 53.5% of our respondents using additives in their fuel oil. **Table 19** shows the results of the additives questions.

Heating Machines

Figure 6 shows a disturbing decline in the percentage of marketers who sell, install and/or service HVAC equipment over the past 12 years. The percentage in **Table 20** (56.8%) is down nearly two points from the figure posted in 1989 (58.1%), and the overall trend is downward as indicated in the graph.

New England and Mid-Atlantic areas showed significant reductions in this area in 1990. The Midwest and South showed small gains. The West was the only really positive region, with a 25% increase in the percentage of marketers offering service/installation.

What makes the downward trend ironic is that it comes at a time when the principal advertising message being promulgated by the industry is its attention to service. This theme, the brainchild of the East Coast Energy Council, is the linchpin of the group's multi-million dollar advertising program in the Northeastern markets. ECEC's ads also are being used throughout oil heat land by other groups as well, so it becomes a bit embarrassing to publicize a trend away from that which you are boasting.

Retail heating equipment sales is an important source of income to 53.6% of the marketers surveyed nationwide, according to **Table 21**. Once again, it's much more important to marketers in the Northeast than in the other sections of the country.

Wholesale equipment sales is important to only 13.6% of our panel, and air conditioning is important to 29.5%. "Other," including swimming pool maintenance, trucking, TBA and a host of other diversified businesses, is an important source of income to 12.4% of the marketers quizzed.

Unfortunately, fewer marketers said that 1990 was a better equipment sales year than 1989, as shown in **Table 22**. Just 23% said residential sales were up, compared with 40.6% who said residential sales increased in 1989 over 1988. On the commercial/industrial side, just 15.5% said business was better in '90 than '89. Last year, 16.2% said C/I sales were above '88.

What They Sell

Tables 23, 24 and **25** show the percentages of marketers who handle the type of equipment listed. Residential oil burners is the top category, but just a hair ahead of

TABLE 27
The Service Department

	% Have Service Depart	Avg No. Calls /Year	Value of Parts Inventory	% Service Depart Profitable	No. of Tech
New England	85.0	3,282	$47,000	52.9	5.9
Mid-Atlantic	61.9	1,642	67,500	48.1	8.6
South	39.5	1,038	29,500	46.7	2.8
Midwest	41.9	800	22,400	55.6	2.4
West	59.3	1,474	29,800	43.8	4.9
All Sections	**57.5**	**1,647**	**$39,200**	**49.4**	**4.9**

TABLE 29
The Gas Threat

	% Saying Gas a Major Threat	% Losing Customers	Avg No. Lost	% Taking Steps to Combat	% Making Gas Convers
New England	55.0	80.0	17.7	77.3	27.3
Mid-Atlantic	69.0	93.1	39.9	48.3	24.1
South	15.8	34.2	16.1	15.8	7.9
Midwest	81.3	93.8	23.2	68.8	43.8
West	48.1	55.6	39.4	40.7	18.5
All Sections	**53.8**	**71.3**	**27.3**	**50.2**	**24.3**

residential furnaces. Very few dealers still handle solar or insulation, hot topics just a few years ago. With the price of oil soaring, however, this could change. Typically, hydronics is more prevalent in the Northeast than in other parts of the country. Some 86.2% of the Mid-Atlantic pollsters handle boilers compared with only 25% in the South and West.

Table 26 gives some average numbers of the units being installed by marketers. Once again residential burners are the largest number, followed closely by residential furnaces. Very little is being done in the commercial/industrial market.

Table 27 gives a breakdown on service departments. As we discussed earlier, the number of marketers who service equipment is down from last year. This year, 57.5% of our panel nationwide said they operated in-house service departments. The Mid-Atlantic is off the most (97.7% in '89 compared to 61.9% this year). New England is down 15%. Only the West is up – 59.3% in '90 vs. 34.9% last year.

The average number of service calls made is 1,647, up about 350 from last year. We forgot to clarify this question so we aren't sure how many of the marketers included annual tuneups in this figure and how many counted just breakdowns.

The average marketer with a service department carries around $39,200 in parts inventory, according to our survey. That's up $11,000 from last year, not surprising in light of the fact that the number of service calls is up.

Just less than half of the service departments are profitable. This trend also is a reversal of prior years, which showed a growing number of marketers who operated at break-even or better. Last year, some 45.9% of our respondents said their departments were profitable, so the short-term trend is upward. The main drop occurred in the Mid-Atlantic, from 61.9% profitable last year to just 48.1% in '90.

The number of technicians on the payroll also went up this year, nearly two persons per marketer. Last year, the average marketer with a service department employed 3.1 technicians. Now they've got 4.9 mechanics.

We expanded the service questions last year to include the number of marketers planning to buy new service trucks in the next 12 months. The average marketer has 5.1 service vans now (that's up from 2.9 vans per dealer last year). Some 31.2% say they're going to buy new vans in 1991. The average number they're planning to buy is 1.9 vans. This sounds like a broken record, but the Northeast leads in the percentage of marketers buying new trucks this year.

TABLE 30
Percent Recommending Equipment Replacement Under Following Conditions

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Boiler leaks	88.9	89.7	18.4	43.8	40.7	56.3
Unit continuously problematic	55.6	72.4	26.3	68.8	44.4	53.5
Operates with no problems, but old & inefficient	77.8	62.1	18.4	56.3	33.3	49.6
Emits fumes	80.6	48.3	10.5	56.3	48.1	48.8
Breaks down	52.8	37.9	7.9	50.0	40.7	37.9
Homeowner threatens to convert to another fuel	38.9	37.9	10.5	43.8	33.3	32.9
Homeowner objects to heating bills	33.3	37.9	10.5	31.3	33.0	29.2
Unit is inefficient (but not necessarily old)	58.3	34.5	10.5	18.8	22.2	28.9

TABLE 32
Percent Indicating Major Factor in Brand Selection

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Quality of construction	77.1	65.5	18.4	81.3	33.3	55.1
Combustion efficiency	71.4	65.5	5.3	68.8	40.7	50.3
Ease of service	60.0	48.3	13.2	43.8	22.2	37.5
Low incidence of service	60.0	34.5	10.5	56.3	22.2	36.7
Durability	31.4	24.1	5.3	37.5	14.8	22.6
Long warranty	37.1	24.1	13.2	18.8	14.8	21.6
Low retail price	17.1	17.2	*	25.0	3.7	12.6
Quietness	20.0	3.4	5.3	25.0	3.7	11.5
Compactness	11.4	*	5.3	6.3	3.7	5.3
High markup opportunity	8.6	3.4	2.6	6.3	*	4.2
Light Weight	5.7	3.4	*	*	3.7	2.6

* - Less than .1%

TABLE 31
Dealers Who Recommend Equipment Replacement by Brand

	% Recommend Brand Names	% of Cust Following Recom
New England	72.2	88.8
Mid-Atlantic	82.8	85.2
South	21.1	80.0
Midwest	75.0	68.0
West	40.7	75.0
All Sections	**58.4**	**79.4**

Marketing

More than half (53.8%) of our panel say that natural gas is a major threat to their businesses. That's 13% more than last year. Also, almost 20% more said they are losing customers to natural gas – 71% this year vs. 54.4% in '89.

Midwestern dealers seem particularly vulnerable, with 81.3% reporting that gas is a major threat and 93.8% saying they're losing customers to the competitive fuel. See **Table 29** for more details.

The average dealer lost about 27 customers this past year, but just 50.2% said they're taking steps to combat these loses. When all else fails, about 24.3% will do the actual conversion to gas. We're unhappy that this number is up from 14.7% last year.

Table 30 shows the percentage of dealers who recommend equipment replacement in the listed circumstances. There has been some repositioning with regard to rank from last year. The third and fourth conditions reversed. Some of the others also moved around in the rankings.

We like to show **Table 31** to our advertisers because it encourages them to keep advertising. Nationally, 58.4% of the dealers surveyed said that they recommend equipment replacement by brand name and 79.4% of the recommendations are followed. That means that the dealer has a lot of clout with the buyer, who trusts the marketer's judgement nearly 80% of the time. The figures are even higher in the Northeast, where the bulk of oil heating equipment is sold.

Why do dealers select equipment? **Table 32** provides a consensus of opinion on the various factors affecting their selection. Quality of construction, combustion efficiency, ease of service and low incidence of service are 1, 2, 3 and 4, which they were last year and have been since we began asking this question several years back. There are some differences between the regions, but overall, these factors are pretty consistent year-to-year.

Table 33 was started last year. We added these questions in order to find out if marketers have finally gotten up off their duffs in order to get new business. There have been too many years of waiting for the phone to ring on the part of the oil heat industry, which gave the competition the opportunity to take a lot of business away from us.

What does Table 33 indicate? Some good news and some bad. First the good: better than 70% of the marketers polled do at least some advertising of their own in addition to whatever is being done by their associations.

Something less than half are doing direct mail, which may be

TABLE 33
How Dealers Market Their Products
(% indicating they use listed strategies)

	Advertising	Direct Mail	Public Relations	Belong to Trade Assn.
New England	80.0	70.0	32.5	77.5
Mid-Atlantic	75.0	40.9	25.0	61.4
South	71.1	34.2	26.3	39.5
Midwest	65.1	41.9	14.0	30.2
West	70.4	44.4	25.9	48.1
All Sections	**72.3**	**46.3**	**24.7**	**1.3**

TABLE 34
Retail Gasoline Outlets and Volume

	Avg. No.	Less Than 50,000*	50,000 - 100,000*	100,000 +*
New England	4.0	37.5	60.5	2.0
Mid-Atlantic	4.7	47.1	23.5	—
South	9.4	35.7	35.7	28.6
Midwest	2.8	55.0	35.0	10.0
West	2.6	55.6	33.3	11.1
All Sections	**4.8**	**46.2**	**37.6**	**10.3**

*** Percent reporting such volume in gals. per month.**

TABLE 35
Industry Publications Most Helpful to Dealers In Operating Their Fuel Oil Businesses
(% reporting)

	New England	Mid-Atlantic	South	Mid-West	West	All Sections
Fuel Oil News	94.6	100.0	92.1	94.6	88.9	94.0
Fueloil & Oil Heat	73.0	69.4	42.1	51.4	40.7	55.3
National Petroleum News	32.4	11.1	23.7	29.7	22.2	23.8
Contractor	10.8	11.1	2.6	2.7	*	5.4
Petroleum Marketer	10.8	5.6	7.9	*	*	4.9
Other	8.1	*	2.6	*	3.7	2.9
Petroleum & C-Store Products	2.7	2.8	5.2	*	3.7	2.9
Oil Daily	2.7	*	5.2	2.7	3.7	2.9
Journal of Petroleum Marketing	8.1	*	2.6	*	*	2.1
Snips	2.7	*	*	2.7	3.7	1.8

*** - Less than .1%**

good in a way. In the past, many marketers relied totally on bill stuffers as their sole means of communicating with their customers. This method of course didn't sell new business and has been demonstrated to be a poor way of publicizing products and services. Perhaps the fact that less than half of the marketers polled say they do direct mail means that at least they've begun to recognize that "cheap" isn't the only criteria.

The bad news is that only 24.7% recognize the effectiveness of public relations and understand how to use it. This is down from 35% who used PR in 1989. Public relations is a very effective means to publicize your company and build your image in the community. There are a number of ways of accomplishing it, such as through sponsorship of little league teams, donations to community causes, articles in the local newspapers and so forth.

The worst news is that only 51.3% of our panel belong to their local oil heat trade association, down four full points from '89. That's a disgrace, considering all that is being done to coordinate a national effort on behalf of oil heat. It means that nearly half of the marketers in the country are getting a free ride! Shame on you!

Motor Fuels

Marketers operate an average of 4.8 gasoline outlets, just under half of which have volumes of less than 50,000 gals. per month. This, according to **Table 34**.

Surprisingly, Midwesterners have one of the lowest average and Southerners marketers the highest. The national average is up one unit from the 1989 figure posted, and a smaller percentage of the stations report less than 50,000 gal. volume than in previous years.

Our traditional last question – **Table 35** – shows that *Fuel Oil News* is still the most helpful publication to dealers. We're way out in front which gratifies us, as usual.

The Verdict

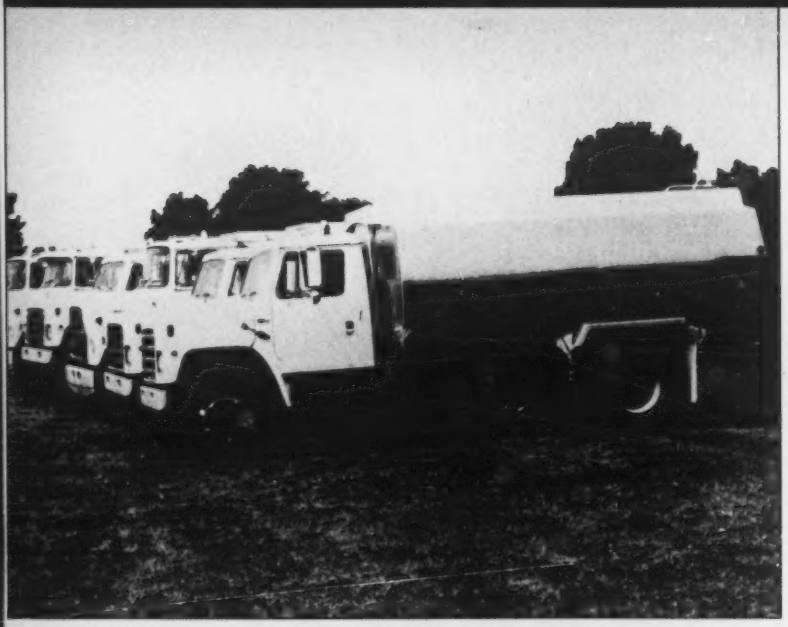
This, then, is our 1990 assessment of the heating oil industry. We closed our 1989 survey saying that we "...anticipate that our next survey will see increased pressure on our market. There are dark clouds on the horizon. Natural gas will once again seriously threaten our viability because of their victories in new pipeline development and renewed confidence in their ability to slug it out with us in the media." Once again, our prediction was right on the money.

All in all, it appears to be a year upcoming that will be interesting, to say the least. There will be continued turmoil as factors over which the oil heating industry has no control will impact the viability of your businesses. High prices will take their toll as competitive fuels will be able to make further inroads into your customer base thanks to aggressive advertising and marketing.

We hope that the figures provided herein help you determine how you stack up vs. your peers and how you can effectively deal with coming events. For manufacturers, we hope these statistics will give you a better picture of how to best serve the oil heating industry.

Again, we thank everyone who participated in the survey. **F•N**

Trucks, Tanks & Service



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